

PDR RID Report

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RID ID PDR 387

Review SDPS

Originator Ref

Priority 2

Section

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Figure Table

Category Name Design-Data Server

Actionee HAIS

Sub Category

Subject Data Distribution/User Model

Description of Problem or Suggestion:

Data distribution scaled at 2 times data processed.

Originator's Recommendation

While this is a requirement against the ECS, and may be appropriate in some instances, there are numbers of data sets for which this is not true. TOPEX/Poseidon data is presently being distributed to 150 users who receive all of the Geophysical Data Record (GDR) data. The expectations for NSCAT and Sea Winds are 300-400 users who will receive all of the distributable products. EOS-ALT will be similar to TOPEX. Resources need to be made available to support this load.

GSFC Response by:

GSFC Response Date

HAIS Response by: Eisenstein

HAIS Schedule 5/22/95

HAIS R. E. Jarvis

HAIS Response Date 6/30/95

Though the current requirement for ECS is that data distribution be scaled at 2 times data processed, sensitivity analyses will be conducted with both the performance and cost models to examine the impacts of additional potential distribution demand by increasing the scaling factors. In addition, a study to understand the probable true distribution demand is being proposed in order to identify whether distribution priority policies need to be put in place to stay within the 2 times data processed requirement. Since the true demand is likely to include both the science and non-science communities, this type of study should not be initiated until a better understanding of the demands of the non-science community are obtained. NASA headquarters is conducting a user model workshop in June that will yield a better understanding of the non-science community demands. This information could serve as one component of such a study.

There are no known limitations in the logical design of the ECS. The hardware is being designed/sized to 2X as directed by ESDIS. Aside from ECS, the limiting factor is the capacity of the EBnet (combined ESN and ECOM) communications which is GFE. The ECS hardware can be upgraded to handle any planned GFE capacity with the most costly hardware being the upgrade of the LANs (wiring) at the DAACs.

As part of the planned sensitivity analysis, we will try saturation of the hardware with various upgrades assuming there is no GFE capacity limitation. The Sensitivity Analysis is currently planned to be complete prior to Release B IDR.

Status Closed

Date Closed 7/11/95

Sponsor Kobler

Attachment if any
